



**EFSEC**

**Washington State  
Energy Facility  
Site Evaluation  
Council**



## **BP CHERRY POINT COGENERATION PROJECT FINAL SCOPING REPORT**

### **Proposed Project**

On June 10, 2002, BP West Coast Products, LLC (BP) submitted an application to the Washington State Energy Facility Site Evaluation Council (EFSEC) to construct and operate a cogeneration facility with 720-megawatt natural gas-fired combustion turbines (CTs). Associated with the proposed generation facility will be approximately 1 mile of new electrical transmission line and an interconnection to the refinery's natural gas pipeline. The proposed BP Cherry Point Cogeneration Project will be located in Whatcom County near the community of Birch Bay. BP has also asked the Bonneville Power Administration (Bonneville) to consider: (1) an interconnection with the Federal Columbia River Transmission System owned and operated by Bonneville at a point at or near the Custer-Intalco 230-kV line and the BP Cherry Point Refinery, and (2) multiple possible point-to-point transmission services from such an interconnection to John Day, Big Eddy, and/or Snohomish substations, and to the Northwest Hub (a group of five substations in the middle Columbia area where energy transactions occur).

### **Environmental Analysis**

EFSEC is the lead agency under WAC 173-11-938 (State Environmental Policy Act [SEPA]) for the environmental review of BP's proposed cogeneration facility. Bonneville is the lead agency under the National Environmental Policy Act (NEPA) for the electrical transmission services, and will coordinate federal agency review. EFSEC and Bonneville will prepare a joint SEPA/NEPA environmental impact statement (EIS) for the project.

### **Public Comments/Scoping**

When siting a new energy facility, EFSEC is required to hold a public information meeting in the county of the project's proposed location. Under SEPA, EFSEC is also required to conduct scoping pursuant to WAC 463-47-090. Bonneville must conduct scoping according to regulations of the Council on Environmental Quality and NEPA guidelines of the Department of Energy. To meet these requirements, EFSEC and Bonneville co-hosted two scoping meetings on July 9, 2002—an agency scoping meeting and a public scoping meeting. The agency meeting was held at 2 p.m. at the BP Cherry Point Refinery. The public scoping meeting was held that evening from 6:30 to 9 p.m. at the Blaine High School Performing Arts Center in Blaine, Washington. At both meetings, BP presented a description of the project, reasons why the proposed site or location was selected, and a summary of anticipated environmental, social, and

economic impacts. EFSEC staff then described the state's siting process, followed by a short presentation by the Counsel for the Environment, a Washington State Assistant Attorney General who represents the citizens of Washington State before EFSEC. In addition, Bonneville staff explained the federal review process for the proposed electrical transmission services.

Agency and public comments were recorded during the meetings and are compiled in this summary report along with written comments submitted on forms provided at the meetings or by e-mail, fax, and letter. Comments are grouped by general topic (and repeated in some cases if they relate to more than one issue). Approximately 33 people attended the agency meeting and approximately 68 people attended the public scoping meeting. Written public comments were received until August 16, 2002.

A summary of oral and written comments received from the agencies and the public through the end of the public comment period is provided below.

### **Air Quality**

- Address greenhouse gas effect and what the project would do to reduce air emissions.
- Describe Oregon Standard for greenhouse gas (GHG) mitigation and how it might apply to mitigate for air pollution.
- Describe the state of Washington's position on the use of the Oregon Standard for GHG mitigation.
- Describe the local and regional (Canadian) health impacts of PM<sub>10</sub> and PM<sub>2.5</sub> emissions.
- Identify the major pollutants of concern.
- Identify how much mercury will be emitted from the new plant.
- Present geographic distribution of air pollutants from the project.
- Present the results of a study of the health effects from PM<sub>10</sub> and PM<sub>2.5</sub>.
- Discuss in detail the mitigation to control the release of PM<sub>10</sub> and PM<sub>2.5</sub>.
- The release of ammonia, which is a precursor for secondary particulate (e.g., ammonium nitrate and ammonium sulfates), should be taken into consideration when describing the issue of fine particulate emissions from the new plant.
- Assess the implications of, and alternatives to, selective catalytic reduction (SCR) technology.
- Address who makes the determination that proposed mitigation is adequate to control air pollution within the U.S. and Canada.
- Present a comparative review of BP's greenhouse mitigation plan to other plans or policies of other energy generators in the region.
- Present the results of the fate and transport studies.
- Explain the potential cancer risks from PM<sub>10</sub> and PM<sub>2.5</sub>.
- Clarify that some criteria pollutants will be reduced, but others will increase.
- Describe how the net reductions in emissions of precursor species (e.g., NO<sub>x</sub> and SO<sub>x</sub>) from the new project would affect the total amount of primary and secondary PM<sub>2.5</sub>.
- Present a description of refinery increase or decrease in air emissions.
- Identify offsets to air emissions and where they would occur.
- Define volatile organic compounds (VOCs) and describe the projected VOC emissions and Environmental Protection Agency (EPA) standard.
- Discuss whether or not the air emissions (CO<sub>2</sub>) would meet the Kyoto protocols.

- Describe air quality and health impacts on Canadian citizens.
- Explain how BP will collaborate and share information on the combined air flow and particulate concentrations for minimum and maximum air quality with existing and 10-year multiple protection in the Greater Vancouver Regional District.
- Describe preventative measures for vulnerable children and adults that need better air quality and awareness.
- Address the air quality impacts on the Cottonwood community in Canada.
- Describe how the project would meet or exceed the emission reduction compared to the SE 2 (Sumas) project.
- Describe how the proposed project will avoid and minimize air emissions to the greatest extent possible, and mitigation measures will be pursued to ensure a net improvement in air quality (e.g., through improvements made to the existing refinery and other offset measures).
- Identify areas of uncertainty of projected air quality impacts, including the relationship between pollutant loading and health effects considered during the development of mitigation measures.
- Address the air quality impacts on the Birch Bay community, which is slated for future growth and will not be a rural area.
- Identify the process for informing communities of potential risks and results from follow-up monitoring.
- Describe a follow-up study to compare projected estimates with actual impacts and evaluate whether mitigation strategies met intended targets.
- Describe a process for incorporating continual improvements as new technology and information becomes available.
- Present mitigation measures to control odors from the refinery and the new facility.
- Describe if projected reductions in emissions are all based on the proposed project.
- Describe if and why this project would generate less emissions than the Sumas (SE 2) project.
- Present EPA air quality standards and if they differ for rural and urban areas.
- Address the project's potential for generating ammonia emissions.
- Address the Council on Environment's responsibilities related to cross-jurisdictional air quality between the U.S. and Canada.

## **Water Resources/Water Quality**

- Describe which permits would be obtained to protect water resources and water quality.
- Describe the quality of the water discharged to the Strait of Georgia and/or Birch Bay.
- Describe the biological and chemical effects of discharging additional wastewater to the marine environment.
- Address how the stormwater facility will be designed to meet Ecology's 2001 Stormwater Management Manual for Western Washington.
- Describe the control, treatment, and discharge of stormwater during construction and operation.
- Describe changes in water use and its implication related to increased demand.
- Compare the current use of freshwater at the refinery to that of the refinery and the cogeneration plant.

- Explain why the current projections of water usage are so different from the ones we heard last fall.

### **Wildlife and Wetlands/Vegetation**

- Describe affected wetlands, their classification and functions, and how wetland impacts would be avoided.
- Explain why the project cannot be located farther to the north and closer to Grandview Road to avoid and minimize wetland impacts.
- Present the results of an analysis of cumulative wetland impacts resulting from the proposed project, recent past projects, and those planned or anticipated in the foreseeable future.
- Present wetland mitigation.
- Identify habitat loss including wetlands, riparian forest, upland forest, and old agricultural fields.
- Describe how the proposed project would protect priority habitats and species.
- Identify outfall water temperature, toxicity, and implications for aquatic species including herring.
- Identify construction methods and timing.
- Explain why the construction laydown areas cannot be restored to wetland after construction is completed.
- Explain how the proposed project would implement mitigation phasing: avoid, minimize, restore, replace, and compensate.
- Provide a detailed wetland mitigation plan so the general public has a chance to comment on it.
- Describe mitigation monitoring methods and success criteria with contingencies and provision for oversight funding.
- Describe the impact on shellfish from the discharge to Birch Bay.

### **Energy and Natural Resources**

- Describe how power generated from the cogeneration facility fits into regional (Northwest) power generation.
- Describe power distribution both locally and regionally.
- Describe how EFSEC views the larger issue of power supply and demand.
- Describe in detail how the sale of power would be accomplished.
- Present a rationale of why the cogeneration facility could not be larger or smaller than currently planned.
- Describe the maximum capacity of the proposed project (720 megawatts?).
- Present information on the regional distribution of power from the power plants in the Northwest.
- Explain capacity issues with the Bonneville power distribution grid.
- Present the results of Bonneville's System Impact Study and Facility Study in the EIS.
- Address any additional Bonneville electrical system upgrades planned for the region.
- Describe if other modifications to the power distribution system would be required to distribute power generated by the project.
- Present all existing and new transmission lines within the region.

- Describe the refinery's current and future power needs.
- Describe why the refinery and the local industries need more power.
- Describe how much additional natural gas the refinery and the cogeneration facility would require in the future.
- Address the long-term supply of natural gas for the refinery and the cogeneration facility and if it is sufficient.
- Describe if a new natural gas compressor is part of the proposed project and where it would be located.
- Locate new transmission lines below the crest of the surrounding hills.
- Identify how many other regional power plants are being planned by Bonneville.
- Describe the Northwest power needs and how Bonneville plans to meet the projected needs.
- Describe how steam would be generated if the cogeneration plant is not operational.
- Identify whether or not BP can sell electrical power to British Columbia.
- Identify additional fuels (backup) if they would be needed for the new project.
- Explain why more power wouldn't be generated for local needs.
- Compare how much power the refinery would require with the total power to be produced.
- Describe where surplus power would be sold.
- Explain if the project would commit some portion of future power sales to the region.
- Explain the power interfacing with the Sumas project.
- Describe the Bonneville service area.
- Describe what alternative fuels are available to the project.
- Describe what powers the steam turbines.
- Explain how the refinery steam is currently produced.
- Describe how the transmission lines would connect to Bonneville's grid.

## **Noise**

- Describe the noise effects as a result of the project.
- Describe the construction and operational noise effects on the Birch Bay community.
- Evaluate the noise impacts on the Cottonwood community.
- Describe the existing refinery noise impacts on the population surrounding Birch Bay.
- Describe the proposed mitigation measures to control noise pollution.

## **Socioeconomic/Public Utilities**

- Address local power sale and economic benefits to the local population.
- Present both beneficial and negative economic impacts on the surrounding communities and the state.
- Describe the socioeconomic impacts of displacing local construction workers when out-of-area contractors bring in construction workers from outside the area.
- Identify whether or not BP will have a local hiring policy for this project.
- Include the tax benefits to the county and the state in the EIS.

## **Health and Safety**

- Describe how fires and escape of harmful emissions would be controlled.

- Describe administrative relationship between the refinery and local fire districts.
- Describe the potential health effects from the new and existing transmission lines in the project area.
- Describe earthquake and disaster preparedness plans.
- Analyze health effects on local and regional communities.

### **Cumulative Impacts**

- Analyze cumulative impacts of air emissions from this project and the Sumas project.
- Assess all air emissions and impacts from existing and planned projects that would affect local and regional populations in Canada.
- Look 20 to 40 years into the future to determine cumulative impacts.
- Assess cumulative impacts on the marine environment particularly related to endangered and commercial species.
- Address impacts that cross the U.S.-Canadian border in the EIS.

### **Project Facilities/Miscellaneous**

- Describe EFSEC's process for environmental and economic review of the project.
- Explain the purpose of the scoping meeting.
- Describe how the project siting process properly followed mitigation sequencing (WAC 197-11-768).
- Describe how long the review process for the project will take.
- Describe the lead agencies and how they determined what the significant impacts would be from the construction and operation of the project.
- Present all the benefits of the project in the EIS.
- Explain how the proposed project will meet all applicable regulations.
- Describe the role of all federal agencies in the preparation and review of the EIS.
- Identify the number of interveners.
- Explain when the public can intervene in the EFSEC process.
- Describe the new equipment to be used for the project.
- Identify the preparers of the EIS.
- Describe maintenance activities and schedule for the new cogeneration facility.
- Describe the Clean Fuels project and how it relates to the proposed cogeneration facility.
- Ensure the EIS is a balanced report that describes beneficial as well as negative impacts.
- Address whether someone from the Department of Health will be on the Council to oversee the development of this project.
- Describe how the EFSEC consultant was selected and if the company would be biased.
- Acknowledge that EISs frequently are biased toward impacts on the natural environment and not enough attention is given to the socioeconomic effects of the proposed project.
- Describe the projected revenue for the project and how much additional revenue would go outside the county.

## **How These Comments Will Be Used**

All the comments received will help identify the key issues to be addressed in the EIS and the impacts of most concern. Everyone who attended the meetings was given the opportunity to be added to the project mailing list.

## **Clarification of Bonneville Interconnection**

During the public scoping meeting, a representative from Bonneville stated that there was enough room or capacity on the Bonneville grid to deliver proposed power from the new BP facilities to local and regional locations. This statement was based on results from the Western System Impact Study completed in April 2002. Subsequent evaluation of the assumptions used for the study indicates that the conclusions of the study may be incorrect or inconclusive. The study assumed the first nine infrastructure projects were built and the proposed Sumas 2 generator was operating. It is now known the Sumas 2 transmission service has been terminated, and the proposed Monroe-Echo Lake 500-kv transmission line is not likely to be completed on the original schedule. In addition, Bonneville has some concerns that the electrical network in the Whatcom County area is congested and modifications to the electrical system may be required in order to accommodate the BP Cherry Point Cogeneration Project as well as other generators within the region.

As a result of the inconclusive results of the Western System Impact Study, Bonneville and BP have entered into an agreement to conduct facility studies to determine the feasibility and requirements of connecting the new BP plant to the federal transmission system and provide point-to-point transmission service to deliver the electrical energy output. The interconnection should be completed in the fourth quarter of 2002, and the delivery portion should be completed early in 2003.

## **Project Schedule and Next Steps**

We are progressing according to schedule and anticipate having a Draft EIS ready for review in December 2002 (pending the timely receipt of environmental reports and information from BP). If you have any questions about the review of this proposed project, please contact Michelle Elling at (360) 956-2124 or michellee@ep.cted.wa.gov, or Tom McKinney at (503) 230-4749 or tcmckinney@bpa.gov. Thank you for your interest in EFSEC's and Bonneville's review of this proposal.

Sincerely,

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Enclosures: Written Scoping Comments